



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

points of interest and should receive the consideration of the advocates of a "circumpolar whirl." Of course, conclusions are not to be drawn from these limited data (and data taken in an expedition of this kind are necessarily limited), but they are in consonance with many other data that invite a reconsideration of prevalent theories of atmospheric circulation.

When the conditions under which these observations were made are considered, their number and their nature must be regarded as a high tribute to the scientific devotion of the observer.

T. C. C.

The Oriskany Fauna of Becraft Mountain, Columbia County, N. Y.

By J. M. CLARK, Ph.D., Mem. N. Y. St. Mus., No. 3, Vol. III.

Becraft Mountain is an outlier composed chiefly of strata of early Devonian age, resting conformably upon the upturned slates of the Hudson River formation. A preliminary paper on the fauna of the Oriskany formation at this locality was published in 1899 by Professor C. E. Beecher, being accompanied by a list of the species present identified by the author of the present report. It was shown at that time that the fauna was a peculiar one, consisting of an intermingling of Helderbergian and Oriskany forms. The present report is a detailed description of the fauna accompanied by good illustrations of all the species.

This discussion of the Becraft Mountain Oriskany fauna by Dr. Clark, brings clearly into view a very different conception of the faunas of Oriskany age in eastern North America from that which has become known through Volume III of the New York Paleontology. At Becraft's Mountain, and in strata extending southward through New York and into New Jersey, a calcareous facies of Oriskany sedimentation occurs, which contains a very different assembly of organisms from that of the original Oriskany sandstone, and which is considered by Dr. Clark as being the normal fauna of the period. In this connection Dr. Clark writes: "In the earlier presentation of this fauna it was regarded as of Lower Oriskany horizon, on account of the presence of many Helderbergian species, but we believe it will be more correctly construed as the representation of the proper and normal Oriskany fauna, the true fauna of this time unit inclosed in the sediments of its proper habitat."

The character of the Oriskany sandstone deposits in New York

from Schoharie county westward are shown to be "a series of arenaceous lenses connected by thin sheets of quartzitic sandstone." In regard to the fauna of these lenses, it is said: "The great brachiopods, *Spirifer arenosus*, *Rensselaeria ovoides*, *Hipparionyx proximus*, and *Meristella lata*, with *Tentaculites elongatus*, which are the species generally present in these lenses, could not have had their habitat on such a deposit and in a sea whose depth favored such deposition. We shall not be wrong in regarding these accumulations of remains in the true Oriskany sandstone as agglomerations, swept out of their facies and away from the more calcareous, deeper water deposits of the time. To regard them as species of the sandy facies of Oriskany time would, I believe, be altogether erroneous. They appertain truly to the calcareous facies and the normal fauna of the Oriskany time."

In the summation of the fauna, ninety-four clearly defined species are recognized, of which "thirty-eight represent expressions of species which began their existence in Helderbergian time; on the other hand but eighteen species of the fauna continue their existence or appear to be represented by closely allied forms beyond the close of the Oriskany sedimentation." Twenty-nine species of the fauna are recognized in the arenaceous Oriskany beds.

The evidence afforded by this fauna as the true Siluro-Devonian boundary line is of much importance. No one disputes the Devonian age of the Oriskany formation, and this fauna demonstrates that there is no natural faunal break in passing from the Helderbergian to the Oriskany, as there should be if the Helderbergian was excluded from the Devonian.

The closing pages of the report are devoted to somewhat minute discussion of the Silurian and Devonian characteristics of the Helderbergian fauna, both the positive and the negative elements being considered, and to a discussion of the stratigraphic argument based upon the relationships of the Maullus limestone.

S. W.